

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1. (Currently Amended) ~~A system~~ Apparatus for controlling a [[the]] demultiplexing process in an optical backplane device having, ~~the optical backplane device including~~ a modulator means, which is controlled by a modulator control signal, for extracting and which extracts a selected compressed data packet from a multiplexed stream of compressed packets[[:]], and a decompressor means for generating decompressed pulse trains corresponding to said selected compressed data packets, said apparatus comprising:

B/ a monitoring means, ~~wherein~~ for monitoring the effect of timing errors in said modulator control signal on said decompressed pulse trains is ~~monitored~~, each decompressed pulse train having a leading edge and a trailing edge; and *leave comma in*

a control signal adjusting means, ~~wherein the~~ for correcting said timing errors ~~are corrected~~ by adjusting the timing of the modulator control signal.

Claim 2. (Currently Amended) A system as claimed in Claim 1, wherein the timing of the modulator control signal is continuously adjusted to ~~minimise~~ minimize timing errors.

Claim 3. (Previously Presented) A system as claimed in Claim 1, wherein the timing of the modulator control signal is advanced if the trailing edge of a given decompressed pulse train is reduced more than the leading edge of said decompressed pulse train and delayed if the leading edge of the given decompressed pulse train is reduced more than the trailing edge of said decompressed pulse train.

2  
Claim 4. (Original) A system as claimed in Claim 3, wherein both the delay and the advance are proportional to the difference in reduction between the leading and trailing edges.

Claim 5. (Previously Presented) A system as claimed in Claim 1, wherein the timing of the modulator control signal makes use of calibration pulse trains of known value and suitable form to adjust the timing of modulator control pulses.

Claim 6. (Original) A system as claimed in Claim 5, wherein the timing of the modulator control signal makes use of a calibratin pulse train consisting of binary 'ones' only.

B/ Claim 7. (Original) A system as claimed in claim 5, wherein the timing of the modulator control signal makes use of a calibration pulse train consisting of a finite repeating sequence of binary 'one' followed by binary 'zero'.

Claim 8. (Cancelled)

---

**Amendments to the Drawings:**

The attached sheet of drawings includes proposed changes to Fig. 1. In Figure 1, the changes are circled in red.

Attachment: Annotated Sheet Showing Proposed Changes